Contents Volume 59 (1991)

Vol. 59, No. 1 (June 15, 1991)

Photo-stimulated coupled transport of electrons and protons across quinone-doped liquid polymer supported biomimetic membrane
N.M. Kocherginsky, M.G. Goldfeld and I.S. Osak (Moscow, USSR) 1
Effect of nonsolvents on the mechanism of wet-casting membrane formation from EVAL copolymers
L.-W. Chen and T.-H. Young (Taiwan, ROC) 15
Permeation studies on supported lecithin liquid membranes
K. Singh and V.K. Shahi (Gorakhpur, India) 27
Porous membrane of *Bombyx mori* silk fibroin: structure characterization, physical properties and application to glucose oxidase immobilization
M. Demura and T. Asakura (Tokyo, Japan) 39
Continuous vapor–gas separation with a porous membrane permeation system
M.M. Qiu and S.-T. Hwang (Cincinnati, OH, USA) 53
Preparation of a sol–gel derived thin membrane on a porous ceramic hollow fiber by the filtration technique
T. Okubo, K. Haruta, K. Kusakabe, S. Morooka (Fukuoka, Japan), H. Anzai and S. Akiyama (Fujisawa, Japan) 73
Concentration polarisation build-up in hollow fibers: a method of measurement and its modelling in ultrafiltration
P. Aimar, J.A. Howell (Bath, UK), M.J. Clifton and V. Sanchez (Toulouse, France) 81
Functional capsule membranes. Part 32. Lipase-immobilized capsule membranes as a reactor in ester syntheses and hydrolyses in organic solvents
K. Ijiro and Y. Okahata (Tokyo, Japan) 101

Meeting Announcements 113
Meetings Calendar 115

Vol. 59, No. 2 (July 1, 1991)

Specifics of highly selective ammonia transport through gas-separating membranes based on perfluorinated copolymer in the form of hollow fibers
S.F. Timashev, A.V. Vorobiev, V.I. Kirichenko, Yu.M. Popkov, V.I. Volkov, R.R. Shifrina, A.Ya. Lyapunov, A.G. Bondarenko and L.P. Bobrova (Moscow, USSR) 117
A new transport model for pervaporation
T. Okada and T. Matsuura (Ottawa, Ont., Canada) 133
A study on the pervaporation of ethanol/water mixtures on the basis of pore flow model
T. Okada, M. Yoshikawa and T. Matsuura (Ottawa, Ont. Canada) 151
A diffusion-controlled model for wet-casting membrane formation
Tai-Horng Young and Leo-Wang Chen (Taiwan, ROC) 169
Study of the swelling phenomena of liquid surfactant membranes
Ding Xuan-cai and Xie Fu-quan (Nanning, People's Rep. China) 183
Selective separation of organic solutes by aqueous liquid surfactant membranes
M. Ulbrich, R. Marr and J. Draxler (Graz, Austria) 189

Skin formation in heterogeneous polymerization reactions
A.G. Mikos and C. Kiparissides (Thessaloniki, Greece) 205
Phase separation in polysulfone/solvent/water and polyethersulfone/solvent/water systems
W.W.Y. Lau (Singapore), M.D. Guiver and T. Matsuura (Ottawa, Ont., Canada) 219

Meeting Announcements 229
Meetings Calender 230

Vol. 59, No. 3 (July 15, 1991)

Surface diffusion of organic vapor mixtures through porous glass
A. Yamasaki (Tokyo, Japan) and H. Inoue (Hachioji, Japan) 233
Modelling of the behaviour of microporous membrane sensors used in the detection of volatile organic solutes in aqueous media
Q.T. Nguyen, J.L. Ninow and I. Marc (Nancy, France) 249
Competition between the electrotransports of acetate and chloride ions through a polymeric anion exchange membrane
J. Sandeaux, R. Sandeaux and C. Gavach (Montpellier, France) 265
Concentration polarisation in a constant flux ultrafiltration rig: prediction of bulk protein concentrations using a lumped parameter model
N. Sanders and J. Hubble (Bath, UK) 277
The effects of aryl-halogenation on the gas permeabilities of poly(phenolphthalein terephthalate) and poly(bisphenol A phthalate)
R.T. Chern and C.N. Provan (Raleigh, NC, USA) 293
Reverse osmosis cellulose acetate membranes. I. Rate of hydrolysis
S.B. McCray, V.L. Vilker and K. Nobe (Los Angeles, CA, USA) 305
Reverse osmosis cellulose acetate membranes. II. Dependence of transport properties on acetyl content
S.B. McCray, V.L. Vilker and K. Nobe (Los Angeles, CA, USA) 317
Preparation and characterization of silicon based inorganic membrane for gas separation
Dong Li and Sun-Tak Hwang (Cincinnatti, OH, USA) 331
The permeation of gases through a poly(ethylene terephthalate) membrane deposited with SiO_2 (*Short Communication*)
P.-V. Mercea (Cluj-Napoca, Romania) and M. Bartan (Bucharest, Romania) 353

Meeting Announcements 359
Meetings Calendar 361
Author Index Volume 59 (1991) 364
Subject Index Volume 59 (1991) 365